

ABSTRACT OF THE DISCLOSURE

The invention provides systems and processes that form the inverse (photographic negative) of a patterned first coating. The patterned first coating is usually provided by a resist. After the first coating is patterned, a coating of a second material is provided therecover. The uppermost layer of the second coating is removed, where appropriate, to expose the patterned first coating. The patterned first coating is subsequently removed, leaving the second coating material in the form of a pattern that is the inverse pattern of the first coating pattern. The process may be repeated with a third coating material to reproduce the pattern of the first coating in a different material. Prior to applying the second coating, the patterned first coating may be trimmed by etching, thereby reducing the feature size and producing sublithographic features. In addition to providing sublithographic features, the invention gives a simple, efficient, and high fidelity method of obtaining inverse coating patterns.